

IN THE CLAIMS

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND the claims as follows:

1. (previously presented) A computer system for conducting a purchase transaction between a consumer and a merchant by using wireless communication using an open and non-secure wireless communication channel, comprising:

a mobile device of the consumer, the consumer mobile device including a storage that stores a consumer mobile device parameter based upon which the consumer mobile device is identifiable and a computer controller that executes:

prompting input of a single parameter not to be permanently stored at the consumer mobile device, as a first input non-transmitted parameter, and

generating a second parameter based upon the stored consumer mobile device parameter based upon which the consumer mobile device is identifiable, as a second generated non-transmitted parameter based upon which the consumer mobile device is identifiable; and

a trusted secure transaction server (STS) device including a computer controller configured to have access to the single parameter to be input and to the consumer mobile device parameter,

wherein the consumer mobile device and the STS device controllers authenticate the merchant and the consumer and verify the purchase transaction between the merchant and the consumer over the open and non-secure wireless communication channel, based upon a changing key derived from both the first input non-transmitted parameter of the consumer mobile device and the second generated non-transmitted parameter of the consumer mobile device from which the consumer mobile device is identifiable.

2. (previously presented) The computer system as in claim 1, wherein the wireless communication channel is a local wireless network and the consumer mobile device comprises a local wireless network interface connecting to the local wireless network.

3. (previously presented) The computer system as in claim 2, wherein the consumer mobile device accepts a private identification entry of the consumer as the single parameter input to the consumer mobile device for the first input non-transmitted parameter.

4. (previously presented) The computer system as in claim 3 wherein the consumer mobile device executes a web browser application providing a user interface to the purchase transaction, a purchasing application executing the verifying and a submit receipt application that generates a receipt of the purchase transaction.

5. (previously presented) The computer system as in claim 2, further comprising a communication network for communication with a merchant device and the STS device that is a wire and/or a wireless network, and the merchant device further comprises a wire and/or wireless network interface connectable to the wire and/or wireless network in communication with the STS device, and

wherein the merchant device executes a merchant retail application program providing a user interface to the purchase transaction and a purchasing application program executes the verifying.

6. (previously presented) The computer system as in claim 4, wherein the consumer mobile device comprises a lightweight processor with storage executing the purchase application, the web browser, and the submit receipt application, and the consumer mobile device further comprises:

a battery;

a display; and

means for a user to input information including navigation buttons or a touch screen of the display.

7. (previously presented) The computer system as in claim 6, wherein the consumer mobile device is credit card sized of approximately 55mm x 85 mm and approximately 10mm thick or thinner.

8. (previously presented) The computer system as in claim 7, wherein the wireless network interface of the consumer mobile device can be any of, WiFi, Bluetooth, UWB, IR, Zigbee, or other local wireless network interface, or a cellular telephone network.

9. (previously presented) The computer system as in claim 1, wherein the consumer mobile device associates, as a proximity binding, with the purchase transaction, based upon one or more of a barcode display, a barcode, an RF-ID tag or location determination.

10. (previously presented) The computer system as in claim 9, wherein the purchase transaction is for purchase of a physical good or a token presentation.

11. (previously presented) The computer system as in claim 10, wherein the consumer mobile device includes means for indicating readiness to authorize payment including one or more of a "Pay" button or a touch screen "Pay" button.

12. (previously presented) The computer system as in claim 4, wherein the consumer mobile device is without a display and comprises means for communicating output including synthesized speech.

13. (previously presented) The computer system as in claim 4, wherein the consumer mobile device is without buttons or a touch screen and comprises input means including a microphone processing input by speech recognition and output means for communicating output including synthesized speech.

14. (previously presented) The computer system as in claim 6, wherein the consumer mobile device further comprising a biometric sensor identifying a user according to one or more of fingerprint or face recognition.

15. (previously presented) The computer system as in claim 6, wherein the consumer mobile device interfaces to a remote display located remotely from the consumer mobile device, on a merchant device.

16. (previously presented) The computer system as in claim 6, wherein the consumer mobile device is a Personal Digital Assistant (PDA) or a mobile phone.

17. (previously presented) The computer system as in claim 5, wherein the local wireless network interface of the consumer mobile device is WiFi and the computer system further comprises a WiFi access point operated by the merchant device and the merchant device provides a directory service on the local wireless network.

18. (previously presented) The computer system as in claim 5, wherein the local wireless interface of the consumer mobile device includes IR and the computer system further comprises an IR access point operated by the merchant device.
19. (previously presented) The computer system as in claim 5, wherein the local wireless interface of the consumer mobile device includes UWB and the computer system further comprises a UWB access point operated by the merchant device.
20. (previously presented) The computer system as in claim 5, wherein the local wireless interface of the consumer mobile device includes Zigbee and the computer system further comprises a Zigbee access point operated by the merchant device.
21. (previously presented) The computer system as in claim 5, wherein the local wireless interface of the consumer mobile device includes WiFi and the computer system further comprises one or more WiFi access points operated by another party as a hotspot application.
22. (previously presented) The computer system as in claim 5, wherein the local wireless interface of the consumer mobile device includes Bluetooth and the computer system further comprises one or more access points operated by another party as a hotspot application.
23. (previously presented) The computer system as in claim 5, wherein the local wireless interface of the consumer mobile device includes IR and the computer system further comprises one or more access points operated by another party as a hotspot application.
24. (previously presented) The computer system as in claim 5, wherein the local wireless interface of the consumer mobile device includes UWB and the computer system further comprises one or more access points operated by another party as a hotspot application.
25. (previously presented) The computer system as in claim 5, wherein the local wireless interface of the consumer mobile device includes Zigbee and one or more access points operated by another party as a hotspot application.
26. (previously presented) The computer system as in claim 5, wherein the local wireless interface of the consumer mobile device is a point-to-point connection based on IR.

27. (previously presented) The computer system as in claim 1, further comprising a wireless communication channel between the consumer mobile device and a merchant device that is a cellular telephone network and the consumer mobile device associates with the purchase transaction, as proximity binding of the consumer.

28. (previously presented) The computer system of any one of claims 17, 18, 19, 20, 21, 22, 23, 24, 25, and 26, wherein the merchant device executes a physical goods purchase as the purchase transaction and associates, as a binding, the physical goods purchase with the consumer mobile device.

29. (currently amended) The computer system as in ~~claim 28~~^{claim 5}, wherein the controller of the merchant device partitions software execution by executing the merchant retail application program and the purchasing application program executing the verifying in separate processing partitions.

30. (previously presented) The computer system as in claim 29, wherein the wire and/or wireless network between the STS device and the merchant device is a secure network connection channel.

31. (previously presented) The computer system as in claim 30, wherein the secure network connection to the STS device is over Internet.

32. (previously presented) The computer system as in claim 31, wherein the secure network connection channel to the STS device is wireless.

33. (previously presented) The computer system as in any one of claims 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, and 27, further comprises multiple local wireless network access points operated by the merchant and granting access to the consumer mobile device.

34. (previously presented) The computer system as in any one of claims 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, and 27, further comprises multiple local wireless network access points operated by another party but granting access to the merchant device and the consumer mobile device.

35. (previously presented) The computer system of claim 1, wherein the STS device includes a secure physical environment protecting integrity of the consumer and merchant accounts.

36. (previously presented) The computer system of claim 35 further comprising a plurality of STS devices handling varying processing load and access demands according to geographic constraints.

37. (currently amended) A user-mobile terminal to communicate over an open and non-secure wireless communication channel with a trusted secure transaction server (STS) device for conducting~~configured to conduct~~ a purchase transaction between a consumer and a merchant, based upon authentication by a trusted secure transaction server (STS), the mobile terminal comprising:

a storage configured to store ~~storing~~ a mobile device parameter based upon which the mobile device is identifiable; and

a computer processor configured to execute controller:

~~prompting~~prompt for input of a single parameter not to be permanently stored at the mobile device, as a first input non-transmitted parameter,

~~generating~~generation of a second parameter based upon the stored mobile device parameter-based upon which the mobile device is identifiable, as a second generated non-transmitted parameter based upon which the mobile device is identifiable, and

~~authenticating the merchant and the consumer and verifying~~generation of the purchase transaction that is authenticable by the STS over the open and non-secure wireless communication channel, based upon a changing key derived from both the first input non-transmitted parameter of the mobile device and the second generated non-transmitted parameter of the mobile device from which the mobile device is identifiable.

38. (currently amended) A method of conducting a purchase transaction using wireless communication over an open and non-secure wireless communication channel between a consumer and a merchant, comprising:

configuring a mobile device of the consumer to:

store a consumer mobile device parameter based upon which the consumer mobile device is identifiable,

~~prompt~~ input of a single parameter not to be permanently stored at the consumer mobile device, as a first input non-transmitted parameter, and

generate a second parameter based upon the stored consumer mobile device parameter, as a second generated non-transmitted parameter based upon which the consumer mobile device is identifiable;

configuring a trusted secure transaction server (STS) device to have access to the single parameter to be input and to the consumer mobile device parameter; and

authenticating by the consumer mobile device and by the STS device the merchant and the consumer for the purchase transaction over the open and non-secure wireless communication channel, based upon a changing key derived from both the first input non-transmitted parameter of the consumer mobile device and the second generated non-transmitted parameter of the consumer mobile device from which the consumer mobile device is identifiable.